



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/937,807

05/08/2002

Claude Annonier

3711-000116

7127

27572

7590

11/05/2003

HARNESSE, DICKEY & PIERCE, P.L.C.

P.O. BOX 828

BLOOMFIELD HILLS, MI 48303

EXAMINER

LAZOR, MICHELLE A

ART UNIT

PAPER NUMBER

1734

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/937,807	Applicant(s) ANNONIER ET AL.	
	Examiner Michelle A Lazor	Art Unit 1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2003.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jefferson et al. (U.S. Patent No. 6395091) in view of Rosenberger et al. (U.S. Patent No. 5916625).

Regarding Claims 1, 4, and 5, Rosenberger et al. disclose a device consisting of a diluent source (500), additive sources (600) (column 14, lines 62 – 67 and column 12, lines 61 – 66); a static mixer (574); conduits communicating with said diluent source and additive sources with said mixer; a spray zone (76) (Figure 1) spraying means (700) connected to receive the output from said static mixer (574) (Figure 14) capable of producing a constant flow rate and to spray it at a spray zone (76); means for transporting a solid foodstuff (78) to said spray zone to receive the liquid food additive (Figures 1 and 3; column 6, lines 6 – 15); wherein in said conduits there are respective regulation valves per liquid food additive associated with the diluent (530) and liquid food additives (630); dilution control means for controlling said regulation valves (630 and 530) to control the rates of flow of the additive and diluent, respectively, to said mixer; said dilution control means being responsive to the flow of solid foodstuff being conveyed by said transporting means to control the rate of flow of the additive in proportion to the flow of solid foodstuff and being effective to vary the flow of diluent in response to the desired total flow rate

Art Unit: 1734

of liquid food additive to said spraying means to maintain a constant total flow rate (column 16, lines 32 – 51); said spray nozzle is aimed towards a conveyor for a solid foodstuff to be sprayed (Figures 1 and 3), and in that the control means are in the form of a microprocessor (column 16, lines 4 – 31); but do not specifically disclose containers for the diluent and the further liquid additives. However, Rosenberger et al. disclose containers for each component of a coating mixture (Figure). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use containers for each component of a coating mixture since it is well known and conventional to hold a given volume of liquid before it is used in a process.

Regarding Claims 2 and 3, Jefferson et al. disclose using flow meters (650) and flow regulation valves (630) for each associated additive used (Figure 14; column 15, lines 8 – 20).

Regarding Claim 6, Jefferson et al. disclose using an air atomizing spray device, which is known to assist in spraying (column 15, lines 52 – 62).

Regarding Claim 7, Jefferson et al. disclose a pump (620) operative to pump a respective said liquid food additive towards at least one mixer; and further characterized in that, in use of the device, diluent is brought to a regulation valve (530) before being introduced into a mixer (574); and liquid food additive is pumped as far as a flow meter (650), into a regulation valve (630), and finally to the mixer (574); and where an injector (700) is provided and is operative to spray the mixture of diluent and liquid food additive with a constant flow rate by a flow of air (column 15, lines 52 – 62), but do not disclose the diluent to include a pump and flow meter. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to include first a pump in the diluent line as a known and conventionally used alternative to using pressure (column 14, lines 41 – 54) and second, it would have been obvious to use a flow meter in the

Art Unit: 1734

diluent line to increase control of the system and improve the accuracy and preciseness of the concentration of the final mixed coating solution.

Regarding Claim 8, Jefferson et al. disclose several spraying means able to be adapted to the throughput of solid foodstuff (Figure 3).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1 – 8 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle A Lazor whose telephone number is 703-305-7976; after 12/22/03, telephone number will be 571-272-1232. The examiner can normally be reached on Mon - Thurs 6:30 - 4:00, Fridays 6:30 - 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 703-308-3853. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

MAL

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jefferson et al. (U.S. Patent No. 6395091) in view of Rosenberger et al. (U.S. Patent No. 5916625).

Regarding Claims 1, 4, and 5, Rosenberger et al. disclose a device consisting of a diluent source (500), additive sources (600) (column 14, lines 62 – 67 and column 12, lines 61 – 66); a static mixer (574); conduits communicating with said diluent source and additive sources with said mixer; a spray zone (76) (Figure 1) spraying means (700) connected to receive the output from said static mixer (574) (Figure 14) capable of producing a constant flow rate and to spray it at a spray zone (76); means for transporting a solid foodstuff (78) to said spray zone to receive the liquid food additive (Figures 1 and 3; column 6, lines 6 – 15); wherein in said conduits there are respective regulation valves per liquid food additive associated with the diluent (530) and liquid food additives (630); dilution control means for controlling said regulation valves (630 and 530) to control the rates of flow of the additive and diluent, respectively, to said mixer; said dilution control means being responsive to the flow of solid foodstuff being conveyed by said transporting means to control the rate of flow of the additive in proportion to the flow of solid foodstuff and being effective to vary the flow of diluent in response to the desired total flow rate

Art Unit: 1734

of liquid food additive to said spraying means to maintain a constant total flow rate (column 16, lines 32 – 51); said spray nozzle is aimed towards a conveyor for a solid foodstuff to be sprayed (Figures 1 and 3), and in that the control means are in the form of a microprocessor (column 16, lines 4 – 31); but do not specifically disclose containers for the diluent and the further liquid additives. However, Rosenberger et al. disclose containers for each component of a coating mixture (Figure). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use containers for each component of a coating mixture since it is well known and conventional to hold a given volume of liquid before it is used in a process.

Regarding Claims 2 and 3, Jefferson et al. disclose using flow meters (650) and flow regulation valves (630) for each associated additive used (Figure 14; column 15, lines 8 – 20).

Regarding Claim 6, Jefferson et al. disclose using an air atomizing spray device, which is known to assist in spraying (column 15, lines 52 – 62).

Regarding Claim 7, Jefferson et al. disclose a pump (620) operative to pump a respective said liquid food additive towards at least one mixer; and further characterized in that, in use of the device, diluent is brought to a regulation valve (530) before being introduced into a mixer (574); and liquid food additive is pumped as far as a flow meter (650), into a regulation valve (630), and finally to the mixer (574); and where an injector (700) is provided and is operative to spray the mixture of diluent and liquid food additive with a constant flow rate by a flow of air (column 15, lines 52 – 62), but do not disclose the diluent to include a pump and flow meter. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to include first a pump in the diluent line as a known and conventionally used alternative to using pressure (column 14, lines 41 – 54) and second, it would have been obvious to use a flow meter in the

Art Unit: 1734

diluent line to increase control of the system and improve the accuracy and preciseness of the concentration of the final mixed coating solution.

Regarding Claim 8, Jefferson et al. disclose several spraying means able to be adapted to the throughput of solid foodstuff (Figure 3).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1 – 8 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle A Lazor whose telephone number is 703-305-7976; after 12/22/03, telephone number will be 571-272-1232. The examiner can normally be reached on Mon - Thurs 6:30 - 4:00, Fridays 6:30 - 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 703-308-3853. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



MAL



RICHARD CRISPINO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700